Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A nonrecursive digital filter, comprising:

an n-stage shift register that sequentially shifts input data having a predetermined number n of bits, and in which an output of each output stage of the shift register is multiplied by a filter coefficient and added, the n-stage shift register being divided into a plurality of shift registers, and each divided shift register being time-divisionally driven in synchronization with the input data.

2. (Previously Presented) A nonrecursive digital filter, comprising:

an n-stage shift register that sequentially shifts input data having a predetermined number n of bits, and in which an output of each output stage of the shift register is multiplied by a filter coefficient and added, the n-stage shift register being divided into first and second shift registers each having n/2 stages, one of the first and second shift registers performing a shift operation at a rising edge of a shift clock, and the other of the first and second shift registers performing a shift operation at a falling edge of the shift clock.

3. (Currently Amended) A nonrecursive digital filter, comprising:

an n-stage shift register that sequentially shifts input data having a predetermined number n of bits, and in which the output of each output stage of the shift register is multiplied by a filter coefficient and added, ~~and~~ the n-stage shift register including:

first and second shift registers to which a spreading-code sequence is input and a shift clock is inputted, each having n/2 stages obtained by dividing the n-stage shift register;

a reference-code register that stores n reference codes;

first and second selection devices that select and output odd-numbered stages and even-numbered stages of the reference-code register according to the shift clock;

a first multiplication device that multiplies an output of each stage of the first shift register by the output of the first selection device;

a second multiplication device that multiplies an output of each stage of the second shift register by the output of the second selection device; and

a correlation-strength calculation device that adds multiplication results of the first multiplication device and the second multiplication device to output a correlation strength;

wherein the first and second shift registers are configured such that ~~either~~ one of the first and second shift registers performs a shift operation at a rising edge of the shift clock and the other performs a shift operation at a falling edge of the shift clock; and

wherein the first and second selection devices are configured such that, when the shift clock is in an ON state, one of the first and second selection devices outputs even-numbered stages of the reference-code register to the first multiplication device and the other of the first and second selection devices outputs odd-numbered stages to the second multiplication device, and when the shift clock is in an OFF state, the one of the first and second selection devices outputs the odd-numbered stages of the reference-code register to the first multiplication device and the other of the first and second selection devices outputs the even-numbered stages to the second multiplication device.

4. (Previously Presented) The nonrecursive digital filter according to Claim 3, the first and second selection devices being formed of multiplexers, each being disposed for two stages of the reference-code register and selecting the odd-numbered stages and even-numbered stages thereof; the first and second multiplication devices being formed of

exclusive-OR circuits; and the correlation-strength calculation device being formed of an adder.

5. (Currently Amended) A radio communication unit employing a CDMA method for performing operations, including path synchronization holding, when receiving a spread-spectrum RF signal from a base station, comprising:

an RF receiving section that converts a received RF signal into a base-band signal;

a correlation section that holds an input digital signal, that holds a spreading code as a reference code, and that performs inverse spectrum conversion while calculating a correlation therebetween~~, to output received data~~; and

a base-band demodulation section that demodulates the received data;

wherein an input side of one of the correlation section and the base-band demodulation section being connected to the RF receiving section, and an output side thereof being connected to the other of the correlation section and the base-band demodulation section; and

wherein the correlation section includes a matched filter formed of the nonrecursive digital filter according to Claim 1.

6. (Currently Amended) A radio communication unit for transmitting information data in packets by a spread spectrum communication method, which directly performs spreading, in a radio local-area network formed with another radio communication terminal, comprising:

an RF receiving section that converts received information data into a base-band signal;

a correlation section that holds an input digital signal, that holds a spreading code as a reference code, and that performs inverse spectrum conversion while calculating a correlation therebetween~~, to output received data~~;

a base-band demodulation section that demodulates ~~the~~ received data; and

a packet processing section that performs packet processing ~~according to the received~~on the demodulated data;

wherein an input side of one of the correlation section and the base-band demodulation section is connected to the RF receiving section and the output side thereof is connected to the other of the correlation section and the base-band demodulation section;

wherein an output side ~~thereof~~ of the base-band demodulation section is connected to the packet processing section; and

wherein the correlation section includes a matched filter formed of the nonrecursive digital filter according to Claim 1.